

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Appellant(s) : Gary J. FORD et al. Confirmation No.: 5374  
Appln. No. : 10/814,226 Group Art Unit: 3711  
Filing Date: : April 1, 2004 Examiner: William Pierce

Title : **FLOORING SYSTEM FOR BOWLING ALLEY**

**REPLY BRIEF UNDER 37 C.F.R. §41.37**

Commissioner for Patents  
United States Patent and Trademark Office  
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401 Dulany Street  
Alexandria, VA 22314

Sir:

This Reply Brief is in response to the Examiner's Answer dated December 20, 2010 ("Answer"), the period for reply extending until February 22, 2011 (February 20, 2011 being a Sunday and February 21, 2011 being a federal holiday). In the Answer, the Examiner has withdrawn the art rejection of claims 1-17 and 34. Accordingly, at least claims 1-17 and 34 are no longer rejected under prior art and should be considered in condition for allowance, pending the resolution of the remaining non-art rejections. Appellants also acknowledge the withdrawal of the rejection of claim 24 and its dependent claims under 35 U.S.C. §112, 1<sup>st</sup> paragraph. The Examiner has maintained the rejections advanced in the Examiner's Answer dated December 20, 2010.

This Reply Brief is being filed under 37 C.F.R. 41.41(a)(1) and is directed to the arguments presented in the Examiner's Answer, and therefore must be entered unless the final rejection is withdrawn in response to the instant Reply Brief. With regard to this Reply Brief, Appellants are addressing points made in the Examiner's Answer and not repeating the arguments set forth in the Appeal Brief filed on September 28, 2010. ("Appeal Brief").

While no fee is believed necessary for submission of this Reply Brief, Appellants authorize the Commissioner to charge any necessary fees to ensure consideration of this Reply Brief to Deposit Account No. 50-2478.

***Issue #1***

At page 13 of the Examiner's Answer, the Examiner asserts:

As set forth above in the rejection, claim 6 merely states a function of intended use for the preformed section to be "used as a section of an approach section". This is NOT a positive recitation of an "approach section". It is a recitation of intended use for a preformed section of the claimed "prefabricated flooring system".

Appellants submit that claim 6 defines the prefabricated preformed section as including "an approach section of a bowling lane". Accordingly, in claim 6, an "approach section" is positively recited, and forms a structural part of the claimed invention. There is no indication, whatsoever, that the approach section is not a positive recitation of the claimed invention. To say otherwise would be ignoring the plain meaning of the claim, and the intended language of the claimed invention.

***Issue #2***

At pages 13 and 14 of the Examiner's Answer, the Examiner asserts:

Turning to claim 7, it positively refers to the "remaining portions of the approach section". Here where an approach section is not considered to be positively recited as part of the claimed combination in claim 6, it further fails to recite that such comprises sections. As such any reference to the approach section which is not positively recited and its comprising sections that are not previously recited at all would render the claim indefinite. Here one cannot be certain if the combination elements in the claimed "prefabricated flooring system" includes or requires an approach section comprising section and as such is indefinite.

As admitted by the Examiner, claim 7, which depends from claim 6, positively recites the "approach section" and, for the first time, "remaining portions". Appellants submit, however, that the Examiner is ignoring the plain meaning of the claims and the features Appellants intend to be part of the claimed features. As the features of claim 6 are positively recited, the features of claim 7 are also positively recited and are certain and definite. Appellants also remind the Examiner of MPEP §2173.02, which states that the test for definiteness under 35 U.S.C. §112, second paragraph, is whether "those skilled in the art would understand what is claimed when the claim is read in light of the specification." *Orthokinetics, Inc. v. Safety Travel Chairs, Inc.*, 806

F.2d 1565, 1576, 1 USPQ2d 1081, 1088 (Fed. Cir. 1986). Definiteness of claim language must be analyzed, not in a vacuum, but in light of: (A) the content of the particular application disclosure; (B) the teachings of the prior art; and (C) the claim interpretation that would be given by one possessing the ordinary level of skill in the pertinent art at the time the invention was made.

***Issue #3***

At page 14 of the Examiner's Answer, the Examiner asserts:

Appellant's argument that the "remaining portions" are provided in a "structural context" is off point for the rejection. Here one cannot determine to what "remaining portions" of the approach section the claim limitations may be addressing. At best, one would have to assume that the approach is made up of a plurality of section and any section that is not considered to be the approach section would be synthetic boards. It is this type of speculation about the scope of the claims that render them indefinite.

Appellants submit that the plain meaning of claim 7, in context of the remaining related claims, is clear and definite. Appellants submit that "remaining portions" in claim 7 clearly defines the "approach section", and, as such, is clear and definite as defined in the claimed invention.

Second, the "remaining portions" and the "approach section" are defined in the claim and in the specification such that one of ordinary skill in the art would understand the invention. For example, the specification defines the approach section and the remaining sections such that one of ordinary skill in the art would understand what is claimed when the claim is read in light of the specification, e.g., see the paragraph spanning between pages 9 and 10 and the paragraph spanning pages 10 and 11. Accordingly, Appellants submit that the rejection of claim 7 is clearly described in the specification in such a manner as to allow one of ordinary skill in the art to understand the invention.

***Issue #4***

At page 14 of the Examiner's Answer, the Examiner asserts:

At the bottom of pg. 7, appellant argues that the "remaining portions" and "approach section" are positively recited without showing how such functional limitations make it clear that these elements are part of the claimed combination.

Appellants disagree. Appellants clearly argued in the Appeal Brief that the "remaining portions" and "approach section" are positively recited with showing how such limitations make it clear that these elements are part of the claimed combination. These limitations are not functional. It would also appear that the Examiner is confused as to the parts of a bowling center, which include an approach section and a bowling lane, amongst other features. Also, Appellants submit that the features of claim 7 are a combination of features including an approach section and its remaining sections. This is defined in the specification at pages 9-11. These features are thus not functional, but are structural features positively recited in the claims and which make part of the claimed invention.

**Issue #5**

At pages 14 and 15 of the Examiner's Answer, the Examiner asserts:

It is off point with the grounds for rejection where appellant argues that the specification also clearly defines the approach section and the remaining sections. The claims were not rejected for failing to find support for the terms in the specification. Instead, the rejection is for indefiniteness and indeterminable if the elements being positively referred to were even positively recited earlier on in the claim as a required part of a combination of elements. Appellant's selections of the specification reproduced on pg. 8 do not overcome the indefinite problems of the claims. As such this argument is unpersuasive.

Again, Appellants remind the Examiner of MPEP §2173.02. According to MPEP §2173.02, Appellants submit that the use of the specification is important with regard to the test for definiteness under 35 U.S.C. §112, second paragraph. The use of the specification is not being used to find support for the terms in the claims, but to show that the claims are not indefinite, in that one of skill in the art would readily understand these terms. Appellants remind the Examiner that definiteness of claim language must be analyzed, not in a vacuum, but in light of: (A) the content of the particular application disclosure; (B) the teachings of the prior art; and (C) the claim interpretation that would be given by one possessing the ordinary level of skill in

the pertinent art at the time the invention was made. Also, as argued above, the claim terms are clearly and positively recited in the claims and thus should be given patentable weight.

***Issue #6***

At page 16 of the Examiner's Answer, the Examiner asserts:

Claim 39 from which claim 40 depends is somewhat different than that of claim 6 in that instead of reciting functionally that the preformed sections are "used as a section of an approach section", it recites more positively that the preformed section "is at least a section of an approach area". Even so, this does not provide an antecedent for the "remaining portions of the approach area" called for in claim 40. Once again, an approach area of a plurality of sections is not part of the claimed combination. Since claim 40 fails to use either an indefinite or definite article with respect to "remaining portions" one cannot determine if one is referring to a previous recitation or "any remaining portions" in general. As such, the Board should consider these claims together and find that rational for affirming the rejection of claim 7 also stand for that of claim 40.

Claim 38 clearly defines preformed section of wooden boards. Claim 39, which depends on claim 38, further defines the preformed section as a section of an approach area. Claim 40, in turn, recites that remaining portions of the approach area are laminate boards of synthetic material or residual wood approach. Accordingly, in claim 39, an "approach area" is positively recited for the first time, and forms a structural part of the claimed invention. Accordingly, the terms "remaining portions" and "approach area" are not inferentially claimed; instead, these limitations are positively recited and connote structure.

***Issue #7***

At pages 17 and 18 of the Examiner's Answer, the Examiner asserts with regard to claim 18:

Appellant argues in favor of claim 18 based upon a narrow view of the claim not supported by its limitations. It only requires the approach section to fill "an area of the bowling lane in addition to gutter area". No limitations in the claim constrain what is considered to be gutter area. Most broadly such term can reasonably be interpreted by its plain meaning be areas around or adjacent to

the gutters. No explicit definition of the term in the specification appears to exist. Appellant argues that the approach lane module 20 of Heddon is of the same size as the remaining modules 10, 12, 14, 16 and specifically designed to be the same size (width) as the remaining modules 10, 12, 14, 16. However, this argument is not commensurate with the scope of the claim since size in general is not being claimed. The only requirement is that the approach section fills some area of the bowling lane in addition to something determined to be "gutter area".

While it appears appellant wishes one to believe that "gutter area" is an area sized to extend wider than the remaining modules, such a view is not supported by the language of the claim. Additionally, appellant's discussion of the approach fill means 28 of Heddon do not teach away from what is being claimed where his preformed section of wooden boards 16 fill an area adjacent to the gutter meeting the broad limitations of the claims. As such, Heddon's approach module extending adjacent to the gutters as shown in fig. 13 meets these broad limitations and the rejection of this claim should be sustained.

To respond to examiner's position, appellant submit that the bowling lane and gutter area are well defined terms to those of skill in the art. However, he points to no authority to support this assertion. The examiner disagrees and, having worked in the art for more than 20 years, does not afford any meaning to the terms beyond their ordinary meaning. Here a gutter area is most broadly any area about the gutters and a bowling lane can most broadly be used to refer to most elements necessary to the game of bowling. For example, one may refer to a bowling lane to include to the deck, ball return, pinsetter, masking unit and/or so forth. As such this argument of appellant is not persuasive and limitations that are not in the claims should not be read into them.

Even if one could possibly construe the claims as narrowly as wished by appellant, the arrangement of an approach panel extending in width to the outer edges of the gutters is well known for example in Fig. 2 Heddon 5,348,513 or Fig. 2 of Hixson 5,540,624 both of record.

Appellants disagree with the Examiner. Specifically, Appellants are not providing a narrow view of the claim not supported by its limitations. It is well known by those of skill in the art that the approach section is not part of the bowling lane. Also, the gutter area is the area on the sides of the bowling lane.

In any event, even taking the Examiner's interpretation that the plain meaning be areas around or adjacent to the gutters, Heddon still shows that the approach section module 20 is of the same size as the remaining modules 10, 12, 14, 16 and specifically designed to be the same size (width) as the remaining modules 10, 12, 14, 16. These remaining modules 10, 12, 14, 16 are only the width of the bowling lane, not any other portion of the bowling center. For this reason, Heddon cannot be said to show the features of claim 18, which recites that "the preformed section of wooden boards is a prefabricated sectioned approach section totally filling an area of the bowling lane in addition to gutter area."

The Examiner further argues that Appellants argument is not commensurate with the scope of the claim since size in general is not being claimed. The only requirement is that the approach section fills some area of the bowling lane in addition to something determined to be "gutter area". Appellants submit that the features of claim 18 are directly related to the size of many structural features of the bowling center. Thus, although a specific dimension is not mentioned, it is clear that the relative size between different components of the bowling center are being claimed in claim 18. And, these different relational sizes cannot be ignored in the interpretation of claim 18.

The Examiner also argues that Appellants wish one to believe that "gutter area" is an area sized to extend wider than the remaining modules, such a view is not supported by the language of the claim. Appellants submit that the "gutter area" is an area sized to extend wider than the remaining modules. This is clearly defined in the specification and the figures, i.e., the relationship of the gutter area, the bowling lane and the approach section. Appellants also submit that one of skill in the art must interpret the claims in view of the specification with, of course, not importing limitations into the claims. In the present situation, Appellants submit that the specification clearly defines the gutter area and bowling lane, and in addition to the claims themselves also make a clear distinction between these two features and their relative dimensions.

Additionally, the Examiner disagrees with Appellants interpretation of claim 18 (i.e., gutter area) while noting his more than 20 years of experience. The Examiner correctly notes that there should be no meaning afforded to the claim terms beyond their ordinary meaning; however, the Examiner then provides meanings well beyond any reasonable ordinary meaning afforded by those of ordinary skill in the art. Here, the Examiner defines the bowling lane to include the deck, ball return, pinsetter, masking unit and/or so forth. Appellants submit that

such an interpretation of a bowling lane is clearly unsupported, improper and, respectfully, incorrect. For example, a bowling lane is a lane in which a bowler will roll a bowling ball towards a set of pins, on a pin deck. The bowling lane reaches from the foul line adjacent to the approach section to the pin deck. The bowling lane includes no moving parts. In contrast, a pinsetter is a very complex mechanism which is designed to pick up pins and place them on the pin deck of a bowling lane for a new frame of bowling. A masking unit, on the other hand, is a curtain which hides the masking unit from bowling patrons. In some bowling centers, the masking unit also provides information about pin count, etc. A ball return is another complex mechanism which runs under or adjacent to the gutters. The ball return is designed to retrieve a thrown ball and return it to the bowler. A quick tutorial at <http://en.wikipedia.org/wiki/Pinsetter> describes the many features of a bowling center, clearly defining the difference between a pinsetter, ball return and a bowling lane, for example.

In any event, Heddon specifically describes an approach fill means used to bridge the area between approach modules, created by the gutters. Specifically, col. 6, lines 6-16 discloses:

Referring now to FIGS. 4 and 6, approach fill means 28 will be described. Approach fill means 28 is sixteen feet in length as are all the other approach and lane modules. The approach fill means is designed to bridge the gap between adjacent approach modules. This gap is created by the spacing required for the insertion of the gutters and ball returns between adjacent bowling lanes. The approach fill means is designed to be readily insertable between adjacent approach modules after the approach modules have been secured to lane support structure 34.

Clearly, the approach module lane 20 does not totally fill an area of the bowling lane in addition to gutter area. Instead, the approach section module 20 is the size of the space between the gutters. That is, Heddon only shows that the approach section is the same size as the bowling lane, and that another module, i.e., approach fill means 28, is needed to fill the gaps between the gutters. In view of the configuration of Heddon:

- (i) As the approach module is the same size as the bowling lane modules, this feature cannot meet the limitations of the claimed invention. This is because the bowling lane modules have a width, by definition, to only extend between the gutters (not beyond the gutters). As the approach module is of the same width, it too cannot

extend between the gutters to fill an area of the bowling lane in addition to gutter area.

- (ii) Heddon specifically describes that there is a gap between the gutters that needs to be filled. As there is a gap between the gutters, it would not be possible for the approach module to fill the entire area of the bowling lane and gutter area.
- (iii) Heddon specifically describes the need for a approach filling means, to fill the area between gutters (e.g., a gap left by the approach module). This gap is merely the size of the space between adjacent gutters. Accordingly, the approach filling means also cannot meet the limitations of the claimed invention, e.g., filling the bowling lane in addition to gutter area.

***Issue #8***

At page 18 of the Examiner's Answer, the Examiner asserts with regard to claim 24:

Appellant argues that Heddon does not show a laminate floor and that none of his modules can be considered a laminate floor. This is untrue since such is disclose on In. 3 of the abstract and at col. 1, In. 18 where Heddon describes his bowling lanes as a "laminated hardwood lane deck". He explicitly recites at col. 2, In. 62 his "modules having laminated hardwood panels". Appellant tries to misguide the Board to define laminate floors as though there is a single accepted definition known in the art.

However, applicant's interpretation is inconsistent with the art as shown above where Heddon considers his structure to be a laminated floor for a bowling alley. More accurately, the term "lamine" is more generic and has a plain meaning including any structure having one or more layers of materials.

Where appellant points to pages 9 and 10 of his specification, such does not remedy the lack of any specific structure being recited in the claims with respect to what is included in a laminated floor of a bowling alley. Note there is no explicit definition of the term used in the specification but merely alludes to the fact that the bowling lane "may be a high pressure laminate flooring system". As stated above, appellants conclusions that, "use of wooden planks, as is known to those of skill in the art, would not be considered a laminate" is not supported by the teachings of Heddon. Therein his prior art

background he refers to the "prefabricated laminated sections" of Grawey 2,788,973 at col. 1, In. 41, "laminated hardwood bowling lane" and "laminated hardwood deck" of DeVore 2,969,983, "laminated sheets" of Green 3,014,722 and so forth. As such it is clear that the bowling lane of Heddon meets the limitations of a "bowling lane, which is a laminate floor" and this grounds for rejection should be sustained.

Appellants disagree with the Examiner. Appellants have provided a meaning to the laminate floors, which is consistent with the specification and that which is known to those of ordinary skill in the art. For example, laminate floors are defined as:

**Laminate Flooring:** Relatively new to North America, laminates have a dense fiberboard core with a paper pattern layer sealed under high pressure both top and bottom with a plastic-like substance. Sold as planks and panels in wood, stone, tile and other looks.

Similar definitions are provided in the specification and at: 1) [en.wikipedia.org/wiki/Laminate\\_flooring](http://en.wikipedia.org/wiki/Laminate_flooring), 2) [www.nalfa.com/glossaryEnglish.php](http://www.nalfa.com/glossaryEnglish.php), 3) [www.remnantkingcarpets.com/Glossary.html](http://www.remnantkingcarpets.com/Glossary.html), and 4) [ezinearticles.com/](http://ezinearticles.com/). In fact, a reference supplied by the Examiner also defines a laminate panel, consistent with the above definitions (see, e.g., Pierre).

The instant specification, at paragraphs 0011, 0012, 0023, 0024 and 0027 of the published application no. 20050221904, also clearly distinguishes a laminate floor from a conventional wooden flooring system. In fact, the present invention shows the shortcomings of a wooden flooring system, compared with a laminate floor. The meaning provided in the specification is consistent with the definitions provided above, and certainly provides guidance when broadly interpreting the claim language (which should not be inconsistent with definitions provided in the specification) . More specifically (with emphasis added),

[0011] Over the years, much advancement has been made to bowling alleys and in particular the flooring systems of bowling alleys. This ranges from the materials used on the flooring system to the installation and upkeep of these flooring systems. For example, synthetic laminate flooring systems, i.e., high pressure laminate systems, have gained popularity amongst bowling alley purveyors due to the ease of installation, the reduction in

maintenance, longer lasting life, reduced impact damage (e.g., denting) from bowling balls and a host of other factors. Thus, the use of laminate flooring systems can lead to reduced overhead costs to the bowling alley purveyors, themselves. This, in turn, will then reduce costs for the bowling alley patrons.

[0012] However, hardwood flooring systems in the approach section still appeal to the "purists". In essence, the hardwood flooring systems provide known slide characteristics that are preferred by many bowlers. So, to appeal to these bowlers, many bowling alleys were retrofitted with a laminated lane, while maintaining a hardwood approach section. This approach was thought to solve many problems by reducing the maintenance of the bowling lane.

[0023] The invention is directed to a prefabricated flooring system used in a bowling alley. This prefabricated flooring system is applicable to both new installations and retrofit installations. In one application, the invention is directed to a prefabricated wood flooring system which can be provided in the approach section of the bowling lane or a section of the approach lane, nearest the foul line and preferably extending about 6 feet therefrom. By using the prefabricated wood flooring system of the invention, the thickness of the wood boards of the approach section can be considerably reduced to, in instances, less than that of conventional systems and can approach the thickness of the laminate bowling lane. This decreases many installation problems. Thus, the installation time of the flooring system in the approach section (or other areas) can be significantly reduced, thus saving time and expense in the installation thereof. The prefabricated flooring system is also resistant to warping, i.e., piano keying, and other damage.

[0024] Referring now to FIG. 1, a diagram of the flooring system of the invention is shown. In the embodiment of FIG. 1, the flooring system includes a bowling lane depicted as reference numeral 100 and an approach section generally depicted as reference numeral 200. The bowling lane 100 is a longitudinally extending lane having a plurality of parallel abutting strips of wood 102. In one aspect, each of the abutting strips of wood 102 is laid in a conventional manner and is approximately 2 3/4 inches in thickness to, amongst other reasons, prevent splintering from the horizontal nails applied during the installation process. However, the lanes may also be fabricated in accordance with the invention, as discussed below. In other implementations, the lane is made of a laminate sheet, without the requirement for individual boards. The thickness of the laminate is typically 1/2 inch thick or less than that of wooden floors.

[0027] In one application, the bowling lane is divided into three sections, "A", "B" and "C". Section "A" is the head/arrow section, adjacent to the foul line 102. Section "B" is the pine section and section "C" is the pin deck area. In this application, the bowling lane, in total, is approximately 25, 35 and 4 feet, respectively, in length. In the wood planking application, the section "A", which is a high impact area, may be a hard wood where the remaining sections are a softer wood for example, pine. It should be understood that the invention should not be limited to the use of beech, maple and pine, and other materials may equally be used with the invention. For example, the bowling lane 100 may be a high pressure laminate flooring system, approximately 42 inches in width (from edge to edge).

As thus shown above, Appellants have clearly defined the meaning of a laminate floor system, as well as providing a distinction between wood and laminate systems. The definition provided by Appellants are not misleading or misguided, in any way, but are consistent with the specification and, thus should be used when interpreting the claims. And, it is clear that the Heddon system would not meet the definition of a laminate flooring system, or Appellants' intent, as Heddon shows a wooden floor system (albeit with a laminate thereon (e.g., varnish).

#### ***Issue #9***

At page 19 of the Examiner's Answer, the Examiner asserts with regard to claim 24:

Where appellant argues that Heddon does not mention that the approach section has a thickness approximately equal to a bowling lane, this is not supported by a thorough reading of the reference. From fig. 4 one can see that the thickness of the approach is approximately equal to that of the bowling lane. As such the limitations of the claim are considered clearly met.

Appellants submit that the drawings cannot be used to reject claimed feature with regard to specific dimensions when the reference makes no mention that the figures are to scale. More specifically, MPEP 2125 states, in pertinent part:

**PROPORTIONS OF FEATURES IN A DRAWING ARE NOT EVIDENCE OF ACTUAL PROPORTIONS WHEN DRAWINGS ARE NOT TO SCALE**

When the reference does not disclose that the drawings are to scale and is silent as to dimensions, arguments based on measurement of the drawing features are of little value. See *Hockerson-Halberstadt, Inc. v. Avia Group Int'l*, 222 F.3d 951, 956, 55 USPQ2d 1487, 1491 (Fed. Cir. 2000) (The disclosure gave no indication that the drawings were drawn to scale. "[I]t is well established that patent drawings do not define the precise proportions of the elements and may not be relied on to show particular sizes if the specification is completely silent on the issue."). However, the description of the article pictured can be relied on, in combination with the drawings, for what they would reasonably teach one of ordinary skill in the art. *In re Wright*, 569 F.2d 1124, 193 USPQ 332 (CCPA 1977) ("We disagree with the Solicitor's conclusion, reached by a comparison of the relative dimensions of appellant's and *Bauer's* drawing figures, that *Bauer* 'clearly points to the use of a chime length of roughly 1/2 to 1 inch for a whiskey barrel.' This ignores the fact that *Bauer* does not disclose that his drawings are to scale. ... However, we agree with the Solicitor that *Bauer's* teaching that whiskey losses are influenced by the distance the liquor needs to 'traverse the pores of the wood' (albeit in reference to the thickness of the barrelhead)" would have suggested the desirability of an increased chime length to one of ordinary skill in the art bent on further reducing whiskey losses." 569 F.2d at 1127, 193 USPQ at 335-36.)

In the present situation, Heddon is completely silent with regard to any dimensions or scale provided to the figures. For this reason, it is not possible for the Examiner to conclude that Heddon shows an approach section which has a thickness approximately equal to a bowling lane. In fig. 4 of Heddon, for example, there is no indication that the thickness of the approach is approximately equal to that of the bowling lane. As such, the limitations of the claim are not met.

**Issue #10**

At page 19 of the Examiner's Answer, the Examiner asserts with regard to claim 24:

Where appellant argues that "there is no indication, whatsoever, that the modules of each of the lane sections of Heddon are designed differently than that of the approach module", no limitations in the

claim requires such. It only requires that the bowling lane be considered a laminate floor. As such this argument is not persuasive.

This is not accurate. Claim 24 clearly recites the features of the approach section, in addition to reciting that the bowling lane is a laminate. As discussed above, there is a clear distinction between a laminate flooring system and a wooden floor.

***Issue #11***

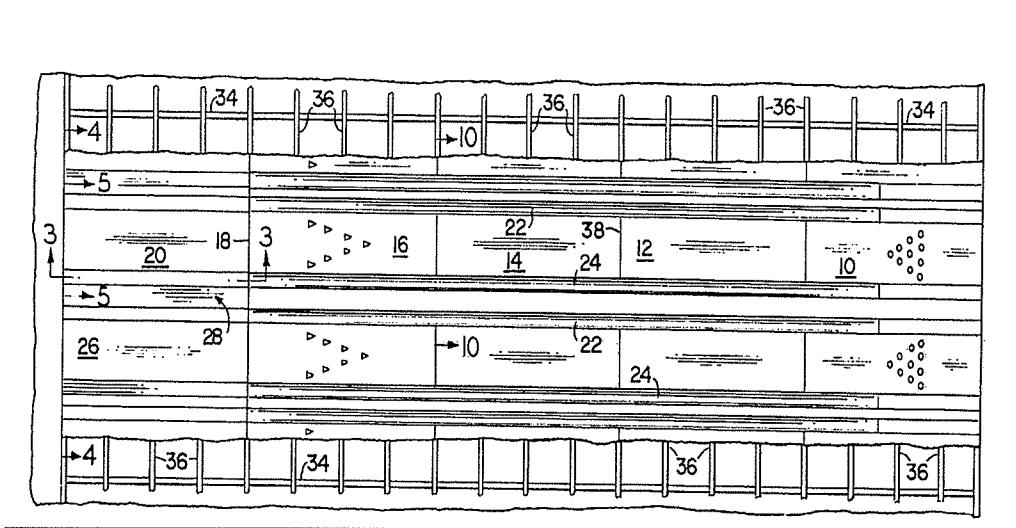
At pages 19 and 20 of the Examiner's Answer, the Examiner asserts with regard to claim 28:

Appellants submit that Heddon does not show a prefabricated approach section that has a width greater than the bowling lane. However, this conclusion is not commensurate with the scope of the claim. First it recites using open language that that the prefabricated approach section comprises a plurality of wooden boards bonded together sided by side. Heddon shows his prefabricated approach section comprising elements 20, 26 and 28 to be wider than bowling lane section 16 as shown in fig. 1.

Here Heddons approach section clearly comprises a plurality of wooden boards bonded sided by side in elements 20 and 26 and one that is wider including elements 28. It is irrelevant to the scope of claim 28 that Heddon refers to sections 28 as an approach fill means since the limitations of the claim are recited using open language.

Appellants submit that regardless of whether open language is used, claim 28 clearly recites that the prefabricated approach section has a width greater than the bowling lane. To interpret otherwise would be contrary to the plain meaning of the claim language.

Figure 1 of Heddon, though, does not show this feature despite the Examiner's argument to the contrary. As shown in the reproduced figure 1 below, it is clearly seen that all of the modules are of the same width. There is no panel in the approach section that is wider than the panels in the bowling lane.



### Issue #12

At pages 20 and 21 of the Examiner's Answer, the Examiner asserts with regard to claims 26 and 27:

... Appellant's arguments are off track. Here the basis of the rejection is that changes in size have been held not to be patentable. In *Gardner v. TEC Systems, Inc.*, 725 F.2d 1338, 220 USPQ 777 (Fed. Cir. 1984), cert. denied, 469 U.S. 830, 225 USPQ 232 (1984), the Federal Circuit held that, where the only difference between the prior art and the claims was a recitation of relative dimensions of the claimed device and a device having the claimed relative dimensions would not perform differently than the prior art device, the claimed device was not patentably distinct from the prior art device.

Additionally, nowhere in his arguments does applicant submit a response to show where his claimed thickness is critical. Note that where the general conditions of a claim are disclosed in the prior art, it is not inventive to discover the optimum or workable ranges by routine experimentation." In re Aller, 220 F.2d 454, 456,105 USPQ 233,235 (CCPA 1955). As is here with the instant issue before the Board, it is recognized that differences will not support the patentability of subject matter encompassed by the prior art unless there is evidence indicating such critical. As such, this grounds for rejection must be sustained.

Appellants disagree with the Examiner. First, the Examiner must examine the claims as a whole, and not in isolation from each of the dependent claims. Claims 26 and 27 admittedly recite dimensions, but these dimensions are related to panels which must match with a bowling

lane, even though different materials are being used for the bowling lane and the approach section. This must be taken into consideration when considering the features of claim 26 and 27. Accordingly, the dimensions are related to an approach section of wooden boards, being matched to a laminate floor. This is no trivial task in that these different materials conventionally have a different thickness.

Moreover, the specification clearly defines the criticality of such dimensions. For example, paragraphs 0024 and 0038 of the present specification (referring again to the publication published application no. 20050221904) states (with emphasis added):

[0024] Referring now to FIG. 1, a diagram of the flooring system of the invention is shown. In the embodiment of FIG. 1, the flooring system includes a bowling lane depicted as reference numeral 100 and an approach section generally depicted as reference numeral 200. The bowling lane 100 is a longitudinally extending lane having a plurality of parallel abutting strips of wood 102. In one aspect, each of the abutting strips of wood 102 is laid in a conventional manner and is approximately 23/4 inches in thickness to, amongst other reasons, prevent splintering from the horizontal nails applied during the installation process. However, the lanes may also be fabricated in accordance with the invention, as discussed below. In other implementations, the lane is made of a laminate sheet, without the requirement for individual boards. The thickness of the laminate is typically 1/2 inch thick or less than that of wooden floors.

[0038] Also, in these applications, nailing of the boards is no longer required in the horizontal direction, thereby reducing the likelihood of splintering of the wood during fabrication. In this manner, the thickness of the wood floors may be reduced considerably since there is no need to maintain the thicker floor due to the splintering. For example, in some retrofit applications, the thickness "T" of the approach section 200 can be reduced to less than 23/4 inches to match the thickness of the flooring on the bowling lane. In one preferred application, the thickness can approach downwards of 3/4 inches in thickness or less. This reduced thickness helps in the installation process due to less weight which, in turn, translates into the need for less wood, and hence less cost for the purchase of the wood.

For at least the above reasons, claims 26 and 27 are distinguishable and should be passed to issue, especially in view of the criticality of the dimensions provided therein.

**Issue #13**

At pages 22 and 23 of the Examiner's Answer, the Examiner asserts with regard to claim 40:

... Here applicant only discusses Pierre and not the combination of the applied references in view of the claim. First, it is the claim that only requires "remaining portions of the approach area" to be "synthetic material or residual wood". Looking to Heddon one can see where the panels 28 of fig. 1 meet the limitations of "remaining portions of the approach area" and that these modules are made of a "hardwood panel" (col. 6, In. 26) which is considered to meet the limitations of "residual wood". Even though a synthetic material is recited in the alternative, Pierre was applied in the alternative to teach that the film of element 58 can meet the limitation of "remaining portions of the approach area" and that it is considered a synthetic material. To have applied a remaining portion of a synthetic layer of film to Heddon as taught by Pierre would have been obvious as a "protective coating" (col. 4, In. 51). Appellant's argument that Pierre is not directed to an approach is not shared by the examiner. From fig. 1 he includes the approach area 38 as being within the scope of his invention. Since such an alternate interpretation of the art reads on the claimed invention, this claim 40 fails to distinguish over the applied art.

Appellants submit that Heddon cannot be used for the residual wood, in that the prefabricated hardwood panels of Heddon are newly installed. There is no residual panels. Also, as to the Pierre reference, Appellants submit that reference numeral 58 only refers to a constituent component of a protective coating. That is, reference numeral 58 refers to a clear, transparent, colorless film 58. This cannot be considered laminate boards of synthetic material. At best, in the context of Pierre, it can be interpreted as wood boards with a synthetic coating, which is much different than the recitations of the claimed invention.

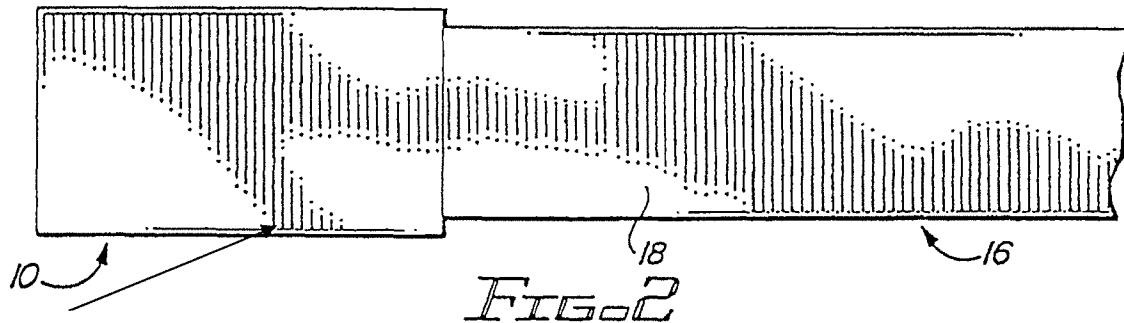
**Issue # 14**

At pages 23 and 24 of the Examiner's Answer, the Examiner asserts with regard to claim 18:

Appellant argues that there is no teaching in any of the references to show that a prefabricated sectioned approach section totally fills an area of the bowling lane in addition to gutter area. One can see this remark as untrue when viewing fig. 1 of DeVore and fig. 2 of Heddon '513 which teaches the dimensions of the approach to

extend to the outer edges of the gutters. As such this grounds for rejection should be sustained as being fairly taught by the applied art.

Appellants submit fig. 2 of Heddon only shows an approach section 10 that is slightly larger than the bowling lane. There is no indication, whatsoever, that the approach section totally fills an area of the bowling lane in addition to the gutter area. In fact, this feature cannot even be ascertained by fig. 2 of Heddon since the bowling lane and the approach section 10 are not even shown in the context of a gutter area. This is clearly seen from the figure reproduced below.



Approach section is slightly larger than the bowling lane, but there is no reference to a gutter area.

As to DeVore in figure 1, regardless of this reference showing an approach section extending between gutter areas, this reference is totally silent of any disclosure of being directed to a prefabricated sectioned approach section. DeVore is, instead, directed to a method of constructing a bowling lane and approach section using an improved securing mechanism for wooden planks.

#### **Issue # 15**

At pages 24 and 25 of the Examiner's Answer, the Examiner asserts with regard to claim 24:

... The Board decision of 3/23/09 stated that [DeVore] lacks showing the approach being "prefabricated". Additionally he does not describe his panel as a "laminated" or the relative thickness of the sections of his alley. To address those deficiencies, Heddon '602

clearly teaches the benefits of prefabricating a panel such as DeVore offsite. He additionally provides and explicit teaching that DeVore shows "laminated hardwood bowling lane" (col. 1, ln. 61) and teaches in fig. 4 where the approach of a lane is of equal thickness to the laminated sections of the alley. With respect to the thickness DeVore does not appear to contain a discussion or show a side cross-section view of his lane sections. Even so, the necessity to keep the upper surface of a lane level fairly suggests to one of ordinary skill in the art that the section are inherently of an identical thickness. Here the claiming of an unknown property which is inherently present in the prior art does not necessarily make the claim patentable. *In re Best*, 562 F.2d 1252, 1254, 195 USPQ 430,433 (CCPA 1977).

... With respect to Heddon '513 appellant distorts a single embodiment to support his cause while failing to consider what is fairly taught. In contrast, he clearly discloses approach section 10 and lane panel 16 in fig. 3 where one can observe that such are of equal thickness. It is clear from the combined teachings that the thickness of a section of the bowling alley is a variable of the relative height of the substrates and the necessity of the bowling surface to be at the same level and seamless. Alternatively where one does not view DeVore to inherently show the thickness of the approach to be the same as the bowling lane, Heddon '602 teaches that such a relationship between the sections of the bowling alley would have been obvious so that its upper surfaces match to provide smooth rolling of the bowling ball thereon. As such, this claim fails to distinguish over the applied art and should be affirmed.

Appellants do not agree with the Examiner on many points. Appellants submit that in accordance with MPEP 2125, it is not permissible to use the drawings to show dimensions unless the reference discloses that the drawings are to scale and arguments based on measurement of the drawing features are of little value. See *Hockerson-Halberstadt, Inc. v. Avia Group Int'l*, 222 F.3d 951, 956, 55 USPQ2d 1487, 1491 (Fed. Cir. 2000). Here, no reference provides such guidance.

Appellants agree with the Examiner, though, that there is the necessity to keep the upper surface of a lane level. However, this does not suggest to one of ordinary skill in the art that the sections are inherently of an identical thickness. Instead, it is equally plausible that shims are placed under the lane and/or approach section to make them level. Thus, this is not a case in which an unknown property is inherently present in the prior art. In fact, Appellants remind the

Examiner of MPEP §2112 which provides the following guidance regarding rejections based on inherency:

The fact that a certain result or characteristic may occur or be present in the prior art is not sufficient to establish the inherency of that result or characteristic. *In re Rijckaert*, 9 F.3d 1531, 1534, 28 USPQ2d 1955, 1957 (Fed. Cir. 1993) (reversed rejection because inherency was based on what would result due to optimization of conditions, not what was necessarily present in the prior art); *In re Oelrich*, 666 F.2d 578, 581-82, 212 USPQ 323, 326 (CCPA 1981). "To establish inherency, the extrinsic evidence 'must make clear that the missing descriptive matter is necessarily present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill. Inherency, however, may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient.' " *In re Robertson*, 169 F.3d 743, 745, 49 USPQ2d 1949, 1950-51 (Fed. Cir. 1999) (citations omitted) ....

In relying upon the theory of inherency, the examiner must provide a basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristic necessarily flows from the teachings of the applied prior art. *Ex parte Levy*, 17 USPQ2d 1461, 1464 (Bd. Pat. App. & Inter. 1990) (emphasis in original) ....

Appellants submit that the Examiner has not factually established that the allegedly inherent characteristic necessarily flows from the teachings of the applied prior art. More specifically, the Examiner has not provided credible basis in fact and/or technical reasoning to support the determination that any of the references necessarily disclose an identical thickness. Instead, the Examiner is merely speculating on what may or might be disclosed by the references. This speculation, however, is insufficient to support a determination that any of the references necessarily discloses identical thickness of boards.

#### ***Issue # 16***

At pages 25 and 26 of the Examiner's Answer, the Examiner asserts with regard to claim 24:

... Appellant additionally mischaracterizes Examiner's position with respect to the terms approach section and bowling lane. A bowling

lane is often a more general term used to refer to all floor components used to bowl where an approach is generally a more specific term to the section used by a player while delivering the ball. This distinction is shown by U.S. Patent 7,022,024 where the term "bowling lane" applies to all sections of the lane including the "approach area, a pin deck area and a lane area" (col. 1, In. 53). Likewise, see 6,988,953, col. 1, Ins. 11-19 and 6,645,082, col. I, In. 10. As such, any discussion in the prior art pertaining to a bowling lane or alley does not necessarily exclude the approach section of the lane. As such, the discussions of the "alley" in DeVore are submitted to suggest the entire bowling surface including the approach as shown in his fig. 1. As such, appellant's remarks fail to show were the examiner is in error or unreasonable in his interpretation of the applied art and this grounds for rejection should be sustained.

Appellants first submit that the Examiner's definition of a bowling lane is inconsistent with the above noted definition with regard to claim 18. Second, the term "bowling lane" does not apply to all sections of the lane including the "approach area, a pin deck area and a lane area". Even Heddon II recognizes that there are different needs for the approach section and the bowling lane, hence different types of material used for these different sections. The approach section and the bowling lane are two different, distinct features of the bowling center. They have different features, different functions and are provided at different locations. The approach section, for example, is a very high wear area that requires special attention. The bowling lanes, on the other hand, require different attention such as, for example, smoothness, planarity and special resins placed thereon to ensure a proper ball roll. This is also noted in the specification of the presently pending application, which is now under appeal.

#### ***Issue # 17***

At pages 26-28 of the Examiner's Answer, the Examiner asserts with regard to claim 38:

Applicant argues that the dovetails of DeVore (col.2, In. 51) are not the same as the interleaved finger joints being claimed. First his specification provides no explicit definition for the term finger joint nor is any other structure provided in the claims. While the term is generally used in wood joining, it is generally made by cutting a set of complementary rectangular cuts into [two] pieces of wood as shown below;

[FIGURE]

These complementary rectangular cuts are the same as that shown by joints 17 and 18 of DeVore. Quite clearly his joint is the same as the finger joint defined above and clearly meets the limitations of the claims. While it may be true that DeVore uses the term "dovetail" to describe his joint, such appears to be more descriptive or ill-defined and does not follow what is ordinarily known to wood joining where a dovetail comprised pins and tails having a trapezoidal shape as shown below;

[FIGURE]

If anything, with respect to the terms used in wood joinery, his use of the term "dovetail" to describe his joint 17 and 18 is more aptly a finger joint as shown in the first illustration above. As one can see from the above, Appellants belief that his claimed finger joint is not the same as DeVore does not agree with the ordinary meaning of term and the teachings of the applied art.

Appellants do not agree with the Examiner. First, Appellants note that the Examiner is introducing new evidence by the use of the two figures showing a dovetail. At least the second figure appears to have been obtained from Wikipedia (see, <http://en.wikipedia.org/wiki/File:Joinery-throughdovetail.svg>). In any event, each of the figures provided by the Examiner show a dovetail joint, not an interleaved finger joint. As is known in the art of wood joinery, a dovetail joins two pieces of wood at a 90 degree angle. A dovetail does not join two pieces of wood in the same plane to provide a flat, level surface for the two joined pieces. This is clearly described in Wikipedia, which shows many different examples of dovetail joints (all of which are providing a joint at 90 degree angle.)

In contrast, an interleaved finger joint joins two pieces of wood in a same plane such as, for example, as shown in FIG. 2b of the present application (reproduced below).

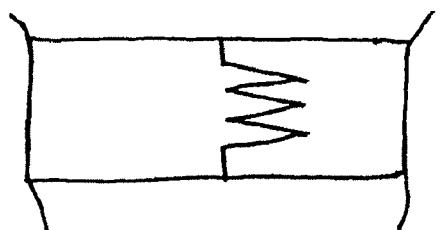


Figure 2b

As such, Appellants clearly show and define an interleaved joint in the specification. Appellants remind the Examiner that Appellants can be their own lexicographer and that definitions provided in the specification can be used to interpret the claimed invention. Accordingly, Appellants continue to argue that the interleaved finger joint is not a dovetail joint, no reference provided by the Examiner shows an interleaved finger joint, and that such interleaved finger joint is clearly defined by Appellants.

***Issue # 18***

At page 28 of the Examiner's Answer, the Examiner asserts with regard to claim 38:

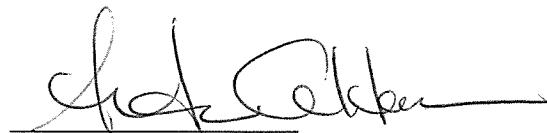
Additionally, appellant mischaracterizes DeVore by stating that the short edges of each plank of wood are merely being adhered to one another by an adhesive to an underlayment. DeVore clearly discloses that adhesive is "forced between the contacting surfaces of said boards upon the placement thereof... securing the said boards to one another" (col. 5, ln. 58). Additionally, appellant remarks that the joints of DeVore are "are flat edges, abutting one another. Instead, the interleaved fingers of the present invention" does not match what is being claimed. The shape of the finger joints, "flat" or otherwise, is not recited in the claim. From the broadest reasonable interpretation of the limitations recited in the claim and meaning to one of ordinary skill in the art, DeVore shows the claimed "finger joint" and this rejection must be sustained.

Appellants submit that they are not mischaracterizing DeVore. Appellants only submit that the panels of DeVore are joined together so that the flat edges are abutting to one another. DeVore does not show interleaved fingers. Also, Appellants are not arguing the shape of the finger joints, e.g., "flat" or otherwise, but are arguing that DeVore does not show the interleaved finger joint, since the ends of the panels in DeVore only abut against each other (flat) without being interleaved in any manner.

**Conclusion**

In view of the foregoing remarks, Appellants submit that the remaining pending rejections should be reversed, and that all of the claims are in condition for allowance.

Respectfully submitted,



Andrew M. Calderon  
Registration No. 38,093

Roberts, Mlotkowski, Safran & Cole PC  
P.O. Box 10064  
McLean, VA 22102  
Phone: 703.677.3011  
Fax: 703.848.2981  
Email: [acalderon@rmsclaw.com](mailto:acalderon@rmsclaw.com)